I-TECH
MEDICAL DIVISION

# *USER MANUAL*

*MNPG128 Rev. 01 Edition 05/05/15*

Paraffin bath

# *WPB-*

# *100/200/300*

**I.A.C.E.R. Srl**
**Via S. Pertini 24/A – 30030**
**Martellago (VE) ITALY**
**Tel. 041.5401356 • Fax 041.5402684**
**e-mail: iacer@iacer.it http://www.itechmedicaldivision.com**

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## Thermotherapy and paraffin bath

Thermotherapy is used successfully in clinicians and rehabilitation fields for the treatment of chronic and traumatic pathologies.
Paraffin bath consists in a comfortable and easy thermotherapy device thanks to the direct application of the warm paraffin wax. It is very indicated for the treatment of chronic pathologies as the rheumatoid arthritis of hands and foot.
Paraffin is very efficient in pain reduction due to the high amount of heat that is released directly on the treated area. Paraffin promotes blood circulation and muscle relaxation.

## Main body and accessories

Model WPB100/101/102: basic model without temperature selection. Working status is showed by a Led indicator.

Model WPB200/201/202: model with temperature selection with a knob. Working status is showed by a Led indicator.

Model WPB200/201/202: model equipped with backlight display and keyboard with temperature selection. Working status is showed by a Led indicator.

## Kit

Main body

Paraffin wax

Single-use Vinyl Pack



Hand cover



Foot cover

Safety plate

## Specifications

WPB-xxx has the following specifications:

- Class IIa equipment (Directive 93/42/EEC, annexed IX, rule 9);
- Class II, applied part type BF (Classif. CEI EN 60601-1);
- CE0476 certificate;
- Equipment not protected against liquids penetration;
- Equipment and accessories not subjected to sterilization;
- Use of the equipment is prohibited close to flammable substances or in environments with high concentrations of oxygen;
- Continuous operating mode equipment;
- Equipment not suited to be used in external.

## Technical Specifications

| | | | |
|---|---|---|---|
| **Power supply** | 230 VAC, 50 Hz | **Size** | 410x245x250mm |
| **Max output power** | 180 W | **Weight** | 2.3 Kg |

## Symbols and labels

| | | | |
|---|---|---|---|
| CE 0476 | **Paraffin Bath** | | |
| | **Model** | **WPB-202** | |
| **Mains voltage** | **AC220~ 240V** | **Power frequency** | **50/60Hz** |
| **Full Power** | **180W** | **Max pressure** | **300mmHg± 10%** |
| | | | |
| IP21 | | | |
| | **I.A.C.E.R srl<br>Via Sandro Pertini 24/A<br>30030 Martellago (VE),<br>Italy** | | |

| | |
|---|---|
| | Warning. Read annex documents |
| | Product subject to WEEE regulations concerning separate waste collection of electronic equipment |
| | Applied part type BF |
| | Class II equipment |

| | |
|---|---|
| CE 0476 | Compliance with Directive 93/42/EEC (MDD) |
| | Manufacturing date |
| | Follow the instruction |
| | Operating instructions |
| IP21 | Device with protection degree IP21 |
| | Keep out of the rain |
| | Humidity range for storage |
| | Temperature range for storage |
| | Do not pushing the device |
| | Do not sitting on the device |
| | Do not stepping on the device |

## Purpose

Clinical purpose: Therapeutic
Use: Clinic/Hospital and domestic use

Chronic and acute pathologies treatment, in particular for joints of hand and foot (for example rheumatoid arthritis).
Thermotherapy for pain reduction.

## Contraindications

Do not use on open wound or cut, on red skin, in presence of neoplasias, blood circulation problems, acute inflammations or in the case of missing/reduced sensitivity (for example in diabetic patients).
Do not use in presence of bleeding or abnormal sensitivity to heat temperature.
Stop the treatment if dermatitis occur after paraffin use.
Stop the treatment if paraffin wax is too heat or too cold, it could indicate patient health problems.
Keep it out of children reach and of persons with cognitive problems or physical disabilities.

## Operating instructions

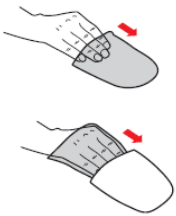
**Model WPB-100/101/102**

1. Place the paraffin Bath on a flat surface and plug in the power cable. Move the ON/OFF switch, placed on device back side, to the ON position. Place 4/6 paraffin packages in the cabin and close the lid. Check that LED is switched on. Wait till the paraffin is completely dissolved (approx. 3-6 hours).

2. Check if the paraffin is completely dissolved, then place the safety plate in the paraffin

dissolver. The safety plate blocks heat transmission and as a consequence the paraffin dissolution.

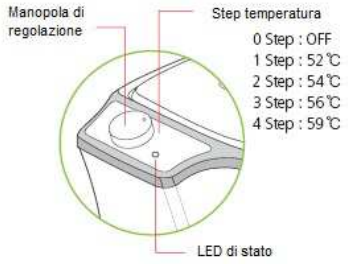
3. Place the hand (or foot) in the warm paraffin solution for 1-2 seconds then immediately remove the hand from the solution. Let it dry for 4-5 seconds. This activity will form a layer of paraffin on one's hand and repeating this 4-5 times will form an even and thick layer of paraffin.
4. To strengthen the heat effect and to reduce the dispersion insert the hand in a vinyl pack and later in the hand cover or foot cover.
5. After 15 minutes remove the hand cover or foot cover and the vinyl pack.



The treatment can be applied also on different areas as shoulders or knees using a brush to form a paraffin layer.

**Model WPB-200/201/202**

1. Place the paraffin Bath on a flat surface and plug in the power cable. Move the ON/OFF switch, placed on device back side, to the ON position. Place 4/6 paraffin packages in the cabin and close the lid. Check that LED is switched on. Select the temperature through the knob. Wait till the paraffin is completely dissolved (approx. 3-6 hours).



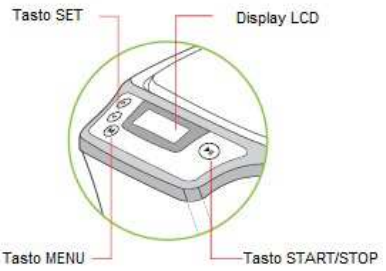
2. Check if the paraffin is completely dissolved, then place the safety plate in the paraffin dissolver. The safety plate blocks heat transmission and as a consequence the paraffin dissolution.
3. Place the hand (or foot) in the warm paraffin solution for 1-2 seconds then immediately remove the hand from the solution. Let it dry for 4-5 seconds. This activity will form a layer of paraffin on one's hand and repeating this 4-5 times will form an even and thick layer of paraffin.

4. To strengthen the heat effect and to reduce the dispersion insert the hand in a vinyl pack and later in the hand cover or foot cover.
5. After 15 minutes remove the hand cover or foot cover and the vinyl pack.

The treatment can be applied also on different areas as shoulders or knees using a brush to form a paraffin layer.

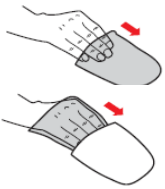
La regolazione di temperatura permette di ridurre i tempi di dissolvimento della paraffina (da 56 a 59°C)

**Modello WPB-300/301/302**




1. Place the paraffin Bath on a flat surface and plug in the power cable. Move the ON/OFF switch, placed on device back side, to the ON position. Select the manual setup or the pre-adjusted start (see the following paragraphs) and press START key. Place 4/6 paraffin packages in the cabin and close the lid. Check that LED is switched on. Wait till the paraffin is completely dissolved (approx. 3-6 hours).

2. Check if the paraffin is completely dissolved, then place the safety plate in the paraffin dissolver. The safety plate blocks heat transmission and as a consequence the paraffin dissolution
3. Place the hand (or foot) in the warm paraffin solution for 1-2 seconds then immediately remove the hand from the solution. Let it dry for 4-5 seconds. This activity will form a layer of paraffin on one's hand and repeating this 4-5 times will form an even and thick layer of paraffin.



4. To strengthen the heat effect and to reduce the dispersion insert the hand in a vinyl pack and later in the hand cover or foot cover.
5. After 15 minutes remove the hand cover or foot cover and the vinyl pack.

The treatment can be applied also on different areas as shoulders or knees using a brush to form a paraffin layer.

Temperature selection (from 56° to 59°) allows paraffin dissolution time to be reduced.

**Menu setup for WPB-300/301/302**
**Set time**

- Keeping pressed key for 5 seconds.
- Press and keys to select the Day.
- Press key to confirm and to move to the next field.
- Press and keys to select the hour.
- Press key to confirm and to move to the next field.

- Press and keys to select the minutes.
- Press START/STOP to return to the main menu.

**Manual setup**

- Keeping pressed key for 5 seconds.
- When the temperatures flashing on the display press and key to select the temperature (48-59°C).
- Press START/STOP to start the program.
- Press START/STOP to stop the treatment.

**Pre-adjusted start**

In WPB-300 model the treatment start can be pre-adjusted. With this function you can set the day and the time of treatment start and also the temperature.

- Press key.
- Press and keys to move the cursor to the desired day.
- Press key.
- Press and keys to move the cursor "_" to the desired day and select the program. For example:
    - "Mon": if "_" is displayed, the day is memorized and the machine works properly.
    - "Mon": if "_" disappears, the day is not memorized.
- After the day memorization, press key to move to TIME setup.
- To select START and STOP time press key to use Hour/Minute functions and use and to set the values.
- After setting the STOP time, pressing key to select the temperature by using and keys to set the value.
- Repeat steps 1-7 to set "Day, Start time, Stop time, Temperature" for each day separately.
- Press START/STOP to save the values.

- Once the memorization function is activated, the screen displays "Res, Day" for 10 seconds and the Start time and Stop time are displayed continuously.

## Troubleshooting

| Problem | Solution |
|---|---|
| WPB doesn't switch on | • Check the connection to the domestic plug<br>• Check the ON/OFF button<br>• Check the power supply cable status |
| Paraffin wax doesn't dissolve | • If the device is equipped with temperature selection function, increase the temperature up to 56° and later decrease it gradually |

## Safety cautions

The following cautions guarantee user safety and prevent lesions or damages.
Read carefully the user manual before using the device.
Consult the doctor to receive prescription and instruction before using the product.
Paraffin wax must be replaced after use and the product must be cleaned before and after each use.
Do not drop or throw the product.
Check the rated voltage before using the device.
Do not use the device when it is damaged or when the power cable is damaged.
Before using the Paraffin Bath, check the temperature through a finger.
Do not apply paraffin on skin with lotion, wax, additives or other substances.
Do not overfill the Paraffin Bath with wax.
Please remove the vinyl pack of the paraffin wax when using and do not heat the wax at a microwave or stove.
Please use wax supplied by the fabricant.

In case of rash, sore, swollen skin or other side effect occur, immediately stop the
application and consult a doctor.

The fabricant is responsible for the device safety and performance only in the following events:

- Any changes, repair actions and additions are carried out by authorized personnel;
- The electrical system used for the device working is in compliance with the current regulations;
- The device is used in compliance with the instructions of the user manual.

## Cleaning

Clean the device and its accessories using a soft cloth.
Resistant stains can be removed using a sponge soaked in solution of water and mild soap.
Wait for the complete drying before using the device and its accessories.
Do not use chemical substances, solvents or cleaners to avoid device and accessories damage.

## Maintenance, carriage and storage

If it is used in accordance with the instructions of the user manual, the device does not need a particular regular maintenance.

**Carriage precautions**
It doesn't need any particular carriage precautions: however we recommend to put away the device and its accessories in their own box after every treatment.
Switch off the device after each treatment.
Do not dispose the melted paraffin solution (disposing the liquid paraffin in the toilet, drain, bath tub etc will plug the pipe as it solidifies). Wait until the solution solidifies and then dispose it with regular waste.

If wax happens to fall on the floor, it may cause one to slip. Please clean the floor after it occurs.
When removing the paraffin do not use sharp tools.

**Storage precautions**
The device is protected till following environmental conditions:

Outside of the packaging

| | |
|---|---|
| Temperature | from +5 to + 40 °C |
| Humidity | from 10 to 93% |
| Pressure | from 700 to 1060 hPa |

Inside of the packaging

| | |
|---|---|
| Temperature | from +5 to +40 °C |
| Humidity | from 10 to 93% |
| Pressure | from 700 to 1060 hPa |

## Disposal

The equipment is subjected to WEEE regulations (see the symbol on the label) concerning separate waste collection: when disposing this product, please use the designed areas for disposing electronic waste or contact the manufacturer.

## Warranty

Make reference to the national laws for any warranty conditions by contacting the national distributor (or directly the manufacturer IACER).

## Assistance

Every intervention on device must be performed by manufacturer. For any assistance intervention contact the national distributor or:

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Via S. Pertini, 24/a • 30030 Martellago (VE) -ITALY
Tel. 041.5401356 • Fax 041.5402684
iacer@iacer.it – www.itechmedicaldivision.com

You can get any technical documentation on spare parts but only prior business authorization.

## Spare parts

Contact the distributor or the fabricant for original spare parts at following address:

**I.A.C.E.R. S.r.l.**
Via S. Pertini, 24/a • 30030 Martellago (VE)
Tel. 041.5401356 • Fax 041.5402684
iacer@iacer.it – www.itechmedicaldivision.com

To preserve product warranty, functionality and product safety we recommend to use only original spare parts.

## EMC tables

| Electromagnetic emission | | |
|---|---|---|
| **Emission test** | **Compliance** | **Electromagnetic environment – guidance** |
| RF emissions<br>Cispr 11 | Group 1 | WPB uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment |
| RF emissions<br>Cispr 11 | Class B | WPB is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes. |
| Harmonic emissions<br>IEC 61000-3-2 | Class A<br>Complies | The WPB is suitable for use in all establishments, other than domestic establishments and those directly connected to the public low voltage power supply network that supplies buildings used for domestic purposes |
| Voltage fluctuations/<br>flicker emissions<br>IEC 61000-3-3 | Complies | |

| Electromagnetic immunity | | | |
|---|---|---|---|
| WPB is intended for use in the electromagnetic environment specified below. The customer or the user of WPB should assure that is used in such environment. | | | |
| Immunity test | Test level EN 60601-1-2 | Compliance level | Electromagnetic environment – guidance |
| Electrostatic discharge (ESD)<br>EN 61000-4-2 | ± 6kV contact<br>± 8kV air | ± 6kV contact<br>± 8kV air | Floors should be wood, concrete or ceramic tile. If floor are covered with synthetic material, the relative humidity should be at least 30% |
| Electrical fast transient/burst<br>IEC 61000-4-4 | ± 2kV for power supply lines | ± 2kV per power supply lines | Mains power quality should be at that of a typical commercial or hospital environment. |

| | | | |
|---|---|---|---|
| Impulses<br>EN 61000-4-5 | ±1kV differential mode | ±1kV differential mode | Mains power quality should be at that of a typical commercial or hospital environment. |
| Voltage dips, short interruptions and voltage variations on power supply input lines<br>IEC 61000-4-11 | < 5% $U_T$<br>(>95% dips of $U_T$)<br>per 0,5 cycles<br><br>40% $U_T$<br>(60% dips of $U_T$)<br>per 5 cycles<br><br>70% $U_T$<br>(30% dips of $U_T$)<br>per 25 cycles<br><br>< 5% $U_T$<br>(>95% dips of $U_T$)<br>per 5 seconds | < 5% $U_T$<br>(>95% dips of $U_T$)<br>per 0,5 cycles<br><br>40% $U_T$<br>(60% dips of $U_T$)<br>per 5 cycles<br><br>70% $U_T$<br>(30% dips of $U_T$)<br>per 25 cycles<br><br>< 5% $U_T$<br>(>95% dips of $U_T$)<br>per 5 seconds | Mains power quality should be at that of a typical commercial or hospital environment.<br>If the user of the WPB requires continued operation during power mains interruptions, it is recommended that WPB be powered from an uninterruptible power supply or a battery. |
| Mains power electromagnetic field<br>EN 61000-4-8 | 3 A/m | 3 A/m | Mains power quality should be at that of a typical commercial or hospital environment. |

| r.f. immunity | | | |
|---|---|---|---|
| WPB is intended for use in the electromagnetic environment specified below. The customer or the user of WPB should assure that is used in such environment | | | |
| **Immunity test** | **Test level EN 60601-1-2** | **Compliance level** | **Electromagnetic environment – guidance** |
| Conducted RF EN 61000-4-6 | 3 Veff from 150kHz to 80MHz | 3 Veff from 150kHz to 80MHz | **Portable and mobile RF communications equipment should be used no closer to any part of WPB, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.**<br>**Recommended separation distance:**<br>**d = 1,2 ·√P 150kHz to 80MHz**<br>**d = 1,2 ·√P 80 MHz to 800 MHz**<br>**d = 2,3 ·√P 800 MHz to 2,5 GHz**<br>where (P) is the maximum output power rating of the transmitter in Watts (W) according to the transmitter manufacturer and (d) is the recommended separation distance in metres (m). |
| RF Radiata EN 61000-4-3 | 3 Veff from 80MHz to 2,5GHz | 3 Veff from 80MHz to 2,5GHz | |
| Field strangths from fixed RF transmitters, are determined by an electromagnetic site survey, should be less than the complicance level in each frequency rage. Interference may occur in the vicinity of equipment marked with the following symbol: | | | |

| Recommended separation distances between portable and mobile communications equipment and the WPB | | | |
|---|---|---|---|
| WPB is intended for the use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of WPB can help prevent electromagnetic interferences by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and WPB as recommended below, according to the maximum output power of the communication equipment. | | | |
| **Rated maximum power of the transmitter (W)** | **Separation distance according to the frequency of the transmitter (m)** | | |
| | **150kHz to 80MHz d = 1,2 ·√P** | **80MHz to 800MHz d = 1,2 ·√P** | **800MHz to 2GHz d = 2,3 ·√P** |
| 0,01 | 0,12 | 0,12 | 0,23 |
| 0,1 | 0,38 | 0,38 | 0,73 |
| 1 | 1,2 | 1,2 | 2,3 |
| 10 | 3,8 | 3,8 | 7,3 |

| | | | |
|---|---|---|---|
| 100 | 12 | 12 | 23 |

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in Watts (W) according to the transmitter manufacturer.

Note:
(1) At 80 MHz and 800 MHz the separation distance for the higher frequency range applies.
(2) These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

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**I.A.C.E.R S.r.l.**
*Sede operativa:*
30030 Martellago (VE) - Via. S. Pertini 24/A
Tel +39 041 5401356 - Fax +39 041 5402684
---
*Sede legale:*
S. Marco 2757 - 30124 Venezia
Cod. Fisc./P.IVA IT 00185480274
R.E.A. VE N. 120250 - M. VE001767
Cap.Soc. € 110.000,00 i.v.
www.iacer.it - iacer@iacer.it